

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vigginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/696,986	03/03/1997	PAUL DEFOURNY	DBS38	9267
7	590 09/10/2003			
BROWNING & BUSHMAN 5718 WESTHEIMER SUITE 1800 HOUSTON, TX 77057		EXAMINER		
			LEE, JONG SUK	
	•		ART UNIT	PAPER NUMBER
			3673	
			DATE MAILED: 09/10/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	/ - -
	<u> </u>	08/696,986	DEFOURNY ET AL	_ //
	Office Action Summary	Examiner	Art Unit	-/\
		Jong-Suk (James)		11
	The MAILING DATE of this communication a	, , ,		Iress
Period fo			NE - MONTHO EDOM	$P \setminus$
THE - Exte after - If the - If NC - Failu - Any I	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by statutely received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	l. 1.136(a). In no event, however ply within the statutory minimu d will apply and will expire SIX ate, cause the application to be	, may a reply be timely filed im of thirty (30) days will be considered timely. (6) MONTHS from the mailing date of this cor come ABANDONED (35 U.S.C. § 133).	mmunication.
1)⊠	Responsive to communication(s) filed on 08	<u> 3 June 2000</u> .		
2a)□	This action is FINAL . 2b)⊠ 1	This action is non-fina	l.	
3) 🗌	Since this application is in condition for allow closed in accordance with the practice under the condition of Claims			merits is
	Claim(s) <u>93-115</u> is/are pending in the applic	ation		
•	4a) Of the above claim(s) is/are withdr		nn	
	Claim(s) <u>113-115</u> is/are allowed.	awn nom consideran	VII.	
	Claim(s) <u>93-101,107 and 109-112</u> is/are reje	cted.		
·	Claim(s) <u>102-106 and 108</u> is/are objected to.			
8)□			ent.	
•	ion Papers	•		
9)[The specification is objected to by the Examir	ner.		
10)□	The drawing(s) filed on is/are: a)☐ acc	epted or b) objected	to by the Examiner.	
_	Applicant may not request that any objection to			
11)	The proposed drawing correction filed on			r .
40.	If approved, corrected drawings are required in I	•	1.	
	The oath or declaration is objected to by the E	:xaminer.		
•	ınder 35 U.S.C. §§ 119 and 120			
-	Acknowledgment is made of a claim for forei	gn priority under 35 C	J.S.C. § 119(a)-(d) or (t).	
a)	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority docume			
	2. Certified copies of the priority docume		· · · · · · · · · · · · · · · · · · ·	
* 5	3. Copies of the certified copies of the pri application from the International E See the attached detailed Office action for a list	Bureau (PCT Rule 17.	2(a)).	stage
14)[] A	Acknowledgment is made of a claim for domes	stic priority under 35 t	J.S.C. § 119(e) (to a provisional	application).
) \square The translation of the foreign language packnowledgment is made of a claim for dome			
Attachmen	_			
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 N	terview Summary (PTO-413) Paper No(s otice of Informal Patent Application (PTC her:	• •

Art	Art Unit: 3673					
	DETAILED ACTION					
1.	The Group and/or Art Unit location of your application in the PTO has changed. To a					
in co	orrelating any papers for this application, all further correspondence regarding this applica					
shou	ld be directed to Group Art Unit 3673.					
2.	The request filed on June 8, 2000 for a Continued Prosecution Application (CPA) under					
37 C	FR 1.53(d) based on parent Application No. 08/696,986 is acceptable and a CPA has been					
estał	olished. An action on the CPA follows.					
3.	The preliminary amendment filed on August 12, 1999 has been entered.					
	Claim Rejections - 35 USC § 102					
4.	The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form					
basis	s for the rejections under this section made in this Office action:					
	A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this or a foreign country or in public upon sale in this country, more than one year prior to the date of application for patent in the United States.					
5.	Claims 93, 96-100 and 109-111 are rejected under 35 U.S.C. 102(b) as being anticipat					

I

by Black (US 3,135,103).

Serial Number: 08/696,986

Art Unit: 3673

U

Black discloses a flexible joint for drill string comprises a transfer member (27) for transmitting weight and torque between first and second members (19, 20) through a resilient deformable member/spacer (23). The transfer member extending between the first member and second member and the second member permitting the first member to tile with respect to the second member, and the transfer member includes a series of radial teeth on the first member (19) and recesses in the second member (20) at the portion wherein the transfer member secured at the socket portion (22) of the drill string (see Fig. 2) and a threaded locking ring/plug (27) surrounding the first member and engaging threads on the second member. The second member (20) formed with a connecting means (26, 28) (see Figs. 1-4; col.1, lines 53-72; col.2, lines 1-46)...

6. Claims 93, 94, 100, 107 and 112 are rejected under 35 U.S.C. 102(b) as being anticipated by Bodine (US 4,261,425).

Bodine discloses a drill bit coupled to an orbiting mass oscillator comprises a first member/shank (11), a second member/drill bit body (16) and resiliently deformable connecting member (22) between the first and second members, rolling cutters (14) movably mounted on the drill bit body (see Figs. 1-5; col.2, lines 7-29).

Serial Number: 08/696,986

Art Unit: 3673

7. Claims 93 and 95 are rejected under 35 U.S.C. 102(b) as being anticipated by Ortloff (US 2,740,651).

Ortloff discloses a resiliently coupled drill bit comprising of: a first member/drill bit body (11, 13) for attachment to the drill string; a second member comprising a drilling member/drill cutter (19, 21), and a resiliently deformable spacer (23) intermediate the first and second member for transmitting torque and weight therebetween (see Figs. 1-4; col.2, lines 26-72; col.3, lines 1-48).

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claim 101 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodine.

Although Bodine et al. fails to disclose the connecting member having a hydrogenated nitrile rubber having a Shore A hardness of at least 80, it is well known expedient within the drilling art to utilize the elastomeric material such as the elastomer having a Shore A hardness of at least 80 for resiliently connecting member/ the elastomeric seal in order to reduce extrusion

8

12 13

14

15

10

11

16 17

18

19

20

21

22

Serial Number: 08/696,986

Art Unit: 3673

3

11

12

19

under load. Further, such modification would have constituted an alternative means/ obvious matter of design choice well within the ordinary skill in the art.

Allowable Subject Matter

- 10. Claims 113-115 would be allowable over the prior art of record.
- 6 11. Claims 102-106 and 108 are objected to as being dependent upon a rejected base claim,
- but would be allowable if rewritten in independent form including all of the limitations of the base
- 8 claim and any intervening claims.

Conclusion

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other reference cited disclose ..
- 13. Any inquiry concerning this communication or earlier communications from the examiner
- should be directed to Jong-Suk (James) Lee whose telephone number is (703) 308-6777. The
- examiner can normally be reached between the hours of 6:30 AM to 3:00 PM Monday thru
- Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,
- Heather C. Shackelford, can be reached on (703) 308-2978. The fax phone number for this
- 18 Group is (703) 305-3597.
 - Any inquiry of a general nature or relating to the status of this application or proceeding

Art Unit: 3673

should be directed to the Group receptionist whose telephone number is (703) 308-2168.

J. Lee /jjl September 4, 2003

2

Jong-Suk (James) Lee Primary Examiner Art Unit 3673